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ABSTRACT

The question of whether the English-as-a-foreign-language (EFL) classroom is an environment that promotes input, feedback, and the production of output that is necessary for successful second language learning is addressed. Such questions have arisen within the context of a growing emphasis on communicative activities and student-to-student interaction in the EFL classroom and concerns about the limited access to input and feedback from native speaker (NS) teachers and to native speakers outside the classroom. In order to address these concerns, the interactions of seven dyads of EFL learners were compared with that of seven dyads of English native speakers on two communication tasks. Results of the comparisons revealed that learner-learner dyads were not significantly different from learner-NS dyads with respect to their contributions of input, feedback, and output as they participated in the common communication tasks. Results of the study thus supported the EFL environment as a learning environment; however, linguistic inaccuracies on the learners' parts suggested that in addition to communicative activities, more targeted, grammar-oriented approaches may also be in order. Six tables and 39 references are included. (Author/KFT)

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Is the EFL environment a language learning environment?[1]

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The following study was undertaken to address questions and concerns about the English as a Foreign Language (EFL) classroom as an environment that promotes input, feedback, and the production of output for second language (L2) learning. Such questions have arisen within the context of a growing emphasis on communicative activities and student-to-student interaction in the EFL classroom, and concerns about limited access to input and feedback from native speaker (NS) teachers and to interaction with NSs outside the classroom. In order to address these concerns, the interaction of seven dyads of EFL learners was compared with that of seven dyads of EFL learners and English NSs on two communication tasks. Results of the comparison revealed that the learner-learner dyads were not significantly different from the learner-NS dyads with respect to their contributions of input, feedback and output as they participated in the communication tasks. In addition, observational data indicated that the learner-learner dyads used interactional strategies of scaffolding, completion and self correction, which further related to their input, feedback and output needs. Also observed, however, were learner imprecisions of lexis and morphosyntax that went unaddressed. Results of the study thus supported the EFL environment as a learning environment; however, linguistic inaccuracies on learners' parts suggested that in addition to communicative activities, more targeted, grammar-oriented approaches may be also in order.

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Introduction

Since the mid-seventies there has been a growing interest in communicative language teaching (CLT) both in second and in foreign language contexts (Breen and Candlin 1980; Canale and Swain 1980; Savignon 1991). This interest has brought about numerous methodological changes in the classroom environment, among them a shift from the use of teacher-fronted activities to the implementation of small-group or pair work. By definition, CLT puts the focus on the learner, who must have the opportunity to take part in meaningful communicative interaction in order to respond to genuine communicative needs. Interest in CLT in EFL settings has been especially noteworthy at tertiary level education. First, the large number of students typical to the EFL classroom draws teachers to view small-group and pair work, role plays, and debates as excellent ways to organize class time and provide management. In addition, learners at tertiary levels have experienced other, more traditional teaching methods. Thus, they tend to welcome the change of classroom format that CLT offers.

The present study was carried out in the Basque Country, Spain, with university students who are studying English not only as a foreign language, but for many, as their third language, as they are already bilingual in Basque and Spanish. There is a growing interest among language teachers at university levels in this setting, as well as other EFL contexts, to use communicative activities as a way to bolster input and encourage L2 production in the classroom, an interest that is clearly constrained by the large number of students per classroom and the limited access to both NS teachers and adequate L2 samples.

There have also been important theoretical conditions that have drawn EFL teachers to the use of group and pair work in the classroom. It is now widely acknowledged that access to L2 input, particularly to input that comes through face-to-face interaction and the negotiation of meaning, is vital to the L2 learning process. These claims have been based largely on research from settings in which English is learned and spoken as an L2. Although the need for positive and negative input, as well as the need for learner production of meaningful L2 output are shared by learners in both EFL and English as a Second Language (ESL) settings, there are differences in these contexts that might affect the ways in which these needs are addressed. Unlike ESL learners, EFL learners often lack access to NS models for their linguistic information and to actual L2 samples from everyday social interaction (see Gass 1990 for discussion).

How does the EFL classroom address the learner's need to access L2 input and produce L2 output? Do its activities promote the kinds of interaction and negotiation of meaning that have been shown to serve the learner's input and output needs? These questions formed the backdrop to the present study. Their theoretical framework is described below.

Negotiation and conditions for SLA

Negotiation is a term that appeared in the SLA literature as early as 1980 (see Schwartz 1980). It was later used by Hatch (1983) and operationalized as a construct in a series of papers (Gass and Varonis 1985, 1986, 1989; Varonis and Gass 1985a, 1985b; Pica 1987, 1989, 1991, 1992, 1994, 1998a,1998b; Pica, Holliday, Lewis & Morgenthaler 1989; Pica, Holliday, Lewis, Berducci & Newman 1991). Negotiation occurs when one interlocutor's message becomes unclear or incomprehensible to the other. The negotiation gets under way as one interlocutor signals with questions or comments that the other's preceding message, referred to as a trigger, has not been successfully conveyed. The other interlocutor then responds, often by repeating the message, by uttering a modified version, or by acknowledging or refuting the message with a simple "yes." or "no" (Pica et al. 1996). Both interlocutors thus attempt to repair communication as they work toward mutual comprehension.

Research has shown that when interaction is modified through the triggers, signals, and responses of negotiation, the learner's need to access L2 input and produce output are enhanced considerably. Thus negotiation is claimed to play an important role in setting up conditions for L2 learning. These include:

(i) Input conditions, whereby learners can access positive, comprehensible input that supplies lexical and morphosyntactic data for their learning. Also made available are negative input and feedback that draw learners' attention to L2 form-meaning relationships and toward noticing a gap between their own output and the target input they need to access (Gass 1988; Long 1996; Schmidt 1990).

(ii) Output conditions, through which learners can produce meaningful L2 output and modify it toward greater comprehensibility (Swain 1985, 1995).

These features are illustrated in the following example of negotiation (Pica 1998b):

(1)

English L2 learner	**NS English**
the boys arrive at station	What did you say about the boys?
(Trigger)	*(Signal)*
they arrive at station	oh, really
(Response)	*(Follow-up)*

As shown, the NS's signal provided the learner with negative input as to the overall comprehensibility of the message and also with positive input about noun phrase grammar: By segmenting *the boys* from the learner's

trigger and placing it after the preposition *about*, the NS showed the learner that *the boys* could appear both as the subject of the statement or as the object of a preposition. Modified output was also shown through pronoun substitution by the learner in the utterance labeled as 'response'.

Opportunities to access positive and negative input as well as to produce modified output are especially critical in the EFL classroom, as this is usually learners' principal environment for their L2 learning. The present study was undertaken, therefore, to better understand the EFL environment as one that promotes L2 learning through the interaction that occurs among its learners. The following research questions were advanced:

(i) Do EFL learners modify their interaction through the negotiation of meaning?

(ii) Do they provide each other with the kinds of modified input and feedback claimed to be necessary for SLA?

(iii) Do they produce modified output as a result of their interaction?

The Study

The study was modeled on Pica, Lincoln-Porter, Paninos and Linnell (1996). The Pica et al. (1996) study was carried out on low-intermediate learners in an ESL setting. The present study was similar to Pica et al. (1996) in its overall design but several of its methodological aspects involving subjects and tasks were modified in order to address issues vital to L2 learners in an EFL setting. The following section describes the subjects that participated in the study, the tasks and procedures used in data collection, and the guidelines followed in data.

Subjects

Subjects were fourteen advanced learners of English (seven males and seven females) and seven female NSs of English. The learners were in their second year of studies in the four-year English Philology degree program of the University of the Basque Country. Their TOEFL scores were in the 580-630 range. They were assigned to one of seven dyads of learner-learner (L-L) interactants.

Six of the NSs were North American college students from three different universities, all of them speakers of standard American English. They had come to the Basque Country to study Spanish as members of the USAC (University Studies Abroad Consortium) program. The other NS was a British college student who had come to the Basque Country as an ERASMUS student[2]. They were assigned to one of the seven native speaker-learner (NS-L) dyads. Dyadic distribution of subjects was as follows: 2 were

[2] ERASMUS is the name of an exchange program established between different European universities. The program allows students to complete part of their degree in different host universities in the European Community.

male L/male L pairs, 2 female L/female L pairs, 3 male L/female L pairs, 5 female NS/female L pairs and 2 female NS/male L pairs.

The learners ranged in age from 19-33 (median 22 years). Their median of exposure to English was approximately 10 years. The NSs ranged between 19-22 (median 20 years). Assignment into dyads was based primarily on the participants' availability, which was constrained by class schedules.

Data collection procedure

Recordings were made in a period of approximately one month when the members of the dyads were available. They took place in a laboratory setting at their university. To reduce any possible anxiety they might have had about participating in the study, the learners were told that their performance was not going to have any influence on their grades. They were assured that they were not being tested, and that this was simply an opportunity for them to discuss some topics with other students and, for some of them, with a NS as well. The NSs, as volunteers, who were visiting from other universities and classrooms, were aware that their participation as conversation partners with the NNSs had no bearing on their grades.

One of the researchers introduced the members of the dyads to each other, reviewed instructions for taping, advised them to read the instructions carefully, and left them to work. The L-L dyads participated in two communication tasks, which are described below. Once each dyad completed the tasks, its members informed the researcher and then exited the setting. The tasks consisted of two information gap and two decision making tasks, and were distributed evenly across the dyads.

The information gap task was used for its established effectiveness in providing learners with opportunities to work toward comprehension, feedback and interlanguage modification. This is because they are required to exchange information in order to reach the goal of the task. The decision-making task was used as a way to generate an exchange of ideas as the learners engaged in opinion, argument, and decision oriented outcomes.

The information gap task used with the L-L dyads was "The unlucky man" from Ur's *Discussions that Work* (1996:63). Individual learners were given five different vignettes from a ten-scene story, which they were then told to arrange into a story by exchanging information about the vignettes held uniquely by them. They were not allowed to view each other's pictures or the original ten-scene story until they completed the task.

The decision making task for the L-L dyads, 'The desert island," was taken from S.A. Sadow's *Idea Bank* (1982) and Duff (1986). The learners were told to imagine they were on a sinking ship. The instructions relayed that there were rubber boats available for their rescue. However, the boats could hold only a limited amount of supplies and people. A small island could be seen in the distance. If their boat made it to the island safely, they

would need things to help them survive until they were rescued. The learners were then given lists of items, arranged into six groups, and were told to choose three items from each of the groups. The two members of the dyad had to decide, and agree completely, on which items to take and which to leave behind.

The L-NS dyads participated in two communication tasks as well. Their information gap task, also a picture task, was based on *Mathematical games* by Martin Gardner (Ur 1996:62). Their picture sequence consisted of seven drawings; each member of the dyad had three of those and they were allowed to see the seventh, remaining drawing. The task required members of the dyad to describe the scenes they held, and uncover the story line behind them. In the pictures they saw a man that had to take a goat, a wolf and a cabbage in a small boat from one island to another. Specific instructions were given as to which two animal/vegetable combinations could be left together on one of the islands. For example, they read in the instructions that the wolf would eat the goat, and the goat would eat the cabbage, if given the opportunity. The members of the dyad had to come up with a logical order for the different scenes and discover how the man managed to solve his transportation problem with animals and vegetables intact.

The decision-making task given to the L-NS dyads was "Choosing candidates" from The Law Scholarship (Ur 1996:72). In this task the members of the dyad were asked to choose one candidate to be awarded an annual Law Scholarship. The dyads were provided with profiles of five candidates who had all attained similar grades on their university entrance exam. There was detailed information about the relative merits of each candidate: their personal backgrounds, needs, tastes and characters.

The tasks used in the present research were somewhat different from those used in the study by Pica et al. (1996), as they were not created by the researchers to target specific linguistic structures. Instead, the current tasks were taken from actual published materials and, therefore, were more open-ended in expectations about linguistic features. The primary motivation for the choice of these tasks was that they resembled the kinds of communicative activities typically employed in tertiary and university EFL classrooms.

A total of six hours of recording were transcribed and coded. Data were coded according to the negotiation related categories used in Pica (1987), Pica (1992), Pica et al. (1989) and Pica et al. (1991), and focused on the input and interactional modifications contained therein. As in Pica et al. (1996), coded as lexical modification were synonym substitution and paraphrase of all or part of prior utterances that triggered the signals and responses of negotiation. Coded as structural modification were simple extractions of individual constituents such as lexical items and phrases from prior utterances and segmentation with embedding into longer phrases or more complex utterances. Several of these features of modification, were illustrated in the example (1), above, and are discussed within the context of the hy-

potheses advanced below. Full coding procedures can be found in the studies noted earlier in this paragraph. Several rounds of coding between the two researchers resulted in agreement of 99%.

Hypotheses

Learner Interaction as a Context for Positive and Negative Input

Hypothesis 1: Learners will provide less modified input than NSs in their responses to other learners' signals of negotiation.

The motivation for this hypothesis came from studies by Pica (1992) and Pica et al. (1990) in which learners were found to produce much less lexical and syntactic modification in response to NSs' signals than NSs produced in response to learners' signals, presumably because they lacked the linguistic resources for lexical substitution and paraphrase and for introducing alternative structures when clarifying message meaning. It was believed that the learners in the present study, though more advanced in their L2 development than those in Pica's research, might still have limited resources for interlanguage modification despite their overall level of proficiency.

Hypothesis 2'a: Modifications in learners' responses will be less evenly distributed by type than those of NS. Learners will segment individual words and phrases from their prior utterances more often than they will make other modifications, such as lexical substitution and paraphrase, structural changes of embedding, or relocation of prior utterance constituents.

The motivation for Hypothesis 2'a was based on the observation that the predominant manner of modification on the part of learners in response to signals from NSs is to extract and repeat an isolated word or phrase from a prior utterance through a form of modification that Pica et al. (1996:64) referred to as segmentation, reported in Porter (1983, 1985), and illustrated in example (1), above. In the study of Pica et al. 1996, NSs were shown to use the same kinds of segmentation as learners, but their repertoire of modifications extended beyond this feature. Thus, they also used other types of modification involving lexical substitution and paraphrase. There was, therefore, a considerable difference between the type of modifications that learners and NSs were shown to offer as input for L2 learning.

An alternative hypothesis was posited for the present study, given the more advanced level of proficiency among its learners. Thus, it was argued that these learners might not limit themselves to segmentation as often as the low-intermediate level students in Pica et al. (1996). This motivated Hypothesis 2'b:

Hypothesis 2'b: Modifications in learners' responses will be comparable to distribution by type as those of NSs. Learners will segment individual words and phrases from their prior utterances as often as they will make other modifications such as lexical substitution and paraphrase, structural changes of embedding, or relocation of prior utterance constituents.

The third hypothesis was relevant to the issue of learners as input providers.

Hypothesis 3'a: Learners' responses of simple segmentations of their own prior utterances will conform more to L2 morphosyntax than their responses of other modification types.

The motivation for this hypothesis came from observations regarding the brevity and simplicity of the segmentations used by learners, as compared with the modifications used by the NSs, which included structural adjustments such as paraphrase and embedding of utterance constituents. Hypothesis 3'a speculated that learners would be likely to use standard L2 morphosyntax when extracting a word or phrase from a previous utterance, and unlikely to do so when faced with the linguistic challenge of paraphrase or constituent embedding.

As was the case with Hypothesis 2, there was an alternative hypothesis for 3'a, based on the argument that, as the subjects in the present study were advanced learners, they might be expected to exhibit the same conformity to L2 morphosyntax both when they use segmentation and when they use other types of modification. Hypothesis 3'b was stated as follows:

Hypothesis 3'b: Learners' responses will conform to L2 morphosyntax, in equal distribution, regardless of whether they are simple segmentations of their own prior utterances or responses of other modification types.

The next hypotheses were again based on Pica et al. (1996) and they regarded L-L interaction as a context for negative input or feedback. Previous research had documented the fact that learners could be active providers of feedback (Bruton and Samuda 1980). Pica et al. (1996) were particularly concerned in their study with the extent to which learners' signals were encoded with L2 morphosyntax and might thus provide data for each other's L2 learning. The underlying assumption was that learners' signals can serve to call the attention of other learners as to the comprehensibility of their message as well as to the conformity of their utterances to L2 morphosyntax (Pica 1992, 1994; Pica et al. 1990).

Once again, alternative hypotheses were posited, given the linguistic status of the learners, and as argued in Hypotheses 2'a and 2'b:

Hypothesis 4'a: Learners' signals of simple segmentations of each other's prior utterances will outnumber their signals of other modification types.

Hypothesis 4'b: Learners' signals of simple segmentations of each other's prior utterances will be evenly distributed with their signals of other modification types.

The rationale for the next two Hypotheses followed that given for Hypotheses 3'a and 3'b as to the grammaticality of the signals that were encoded through segmentation. On the one hand, their status as learners suggested that modifications of simple segmentation would be more likely than other kinds of modification to be encoded in grammatical L2 input. On the other hand, the advanced level of the learners suggested that they might have available the resources to produce grammatical L2 samples in their other modifications.

Hypothesis 5'a: Learners' signals of simple segmentations of each other's prior utterances will conform more to L2 morphosyntax than their signals of other modification types.

Hypothesis 5'b: Learners' signals will conform to L2 morphosyntax, in equal distribution, regardless of whether they are simple segmentations of prior utterances or signals of other modification types.

Learner Interaction as a Context for Production of Modified Output

The following hypotheses used in the present study reflect those of Pica et al.(1996).

Hypothesis 6: When learners are given signals that modify their previous utterances, they will produce a similar amount of modified output in their responses whether the signals were from other learners or from NSs.

Hypothesis 7: Conversely, when learners are given signals that modify their previous utterances, they will produce more modified output in their responses to other learners than to signals from NSs.

The motivation for both hypotheses came from findings of previous studies of L-NS interaction (Pica 1992,1994) which showed that learners were able to modify and expand their original utterances when they responded to negotiation signals from NSs. The incidence of this modification seemed to be contingent on the types of signals directed at them: open-ended signals from the NSs led to modified output on the part of the learners; modified signals from the NSs led to just yes/no answers by the learners.

The difference in the two hypotheses lay in the learners' perception of

the intention behind the signal. It was believed that if the learners consid ered the NS to be superior in L2 expertise, then they would see little or n reason to attempt additional modification of the NS message and, there fore, would view the signal as an L2 model to employ in follow-up re sponses. In L-L interaction, however, it was believed that the learners migh realize that they shared a lack of L2 expertise as interlocutors and migh therefore consider that each other's signals were offered mainly to seek message comprehensibility. In this case the signal could be seen as the ut terance used to clarify the meaning of the message and, consequently, the learners might modify their input when answering the signal from their peers. In the present study, we hypothesized along the same lines because the hypotheses are motivated by issues pertaining to the role of learners per se and not because of the FL context in which their learning takes place.

Summary

Hypothesis 1: Learners will provide less modified input than NSs in their responses to other learners' signals of negotiation.

Hypothesis 2'a: Modifications in learners' responses will be less evenly distributed by type than those of NSs. Learners will segment individual words and phrases from their prior utterances more often than they will make other modifications, such as lexical substitution and paraphrase, structural changes of embedding, or relocation of prior utterance constituents.

Hypothesis 2'b: Modifications in learners' responses will be comparable to distribution by type as those of NSs. Learners will segment individual words and phrases from their prior utterances as often as they will make other modifications such as lexical substitution and paraphrase, structural changes of embedding, or relocation of prior utterance constituents.

Hypothesis 3'a: Learners' responses of simple segmentations of their own prior utterances will conform more to L2 morphosyntax than their responses of other modification types.

Hypothesis 3'b: Learners' responses will conform to L2 morphosyntax, in equal distribution, regardless of whether they are simple segmentations of their own prior utterances or responses of other modification types.

Hypothesis 4'a: Learners' signals of simple segmentations of each other's prior utterances will outnumber their signals of other modification types.

Hypothesis 4'b: Learners' signals of simple segmentations of each other's prior utterances will be evenly distributed with their signals of other modification types.

Hypothesis 5a: Learners' signals of simple segmentations of each other's prior utterances will conform more to L2 morphosyntax than their signals of other modification types.

Hypothesis 6: When learners are given signals that modify their previous utterances, they will produce a comparable amount of modified output in their responses regardless of whether the signals are from other learners or from NSs.

Hypothesis 7: Conversely, when learners are given signals that modify their previous utterances, they will produce more modified output in their responses to other learners than to signals from NSs.

Results and Discussion

This section will present the results of the study and then compare them with the results obtained by Pica et al. (1996). Similarities and differences will be discussed especially as they bear on the issues involving the advanced learner in an EFL setting.

The first three hypotheses addressed the contributions of learners and NSs as providers of modified input. Hypothesis 1 had predicted that the learners would offer proportionately fewer lexically and structurally modified utterances when responding to each other than would NSs in L-NS dyads. This hypothesis was tested by comparing the percentage of learners' utterances that lexically and/or structurally modified their prior utterances during L-L negotiation with the percentage of NS's utterances that did likewise during L-NS negotiation. As shown in Table 1[1], there was a numerical advantage in favor of the learners both in the picture sequence and in the decision making tasks. However, when the corresponding proportions were compared, the differences between learners and NSs as to the modified input provided were non-significant.

As shown in Table 1, the learners in the picture sequence task produced only three modified utterances, which were 60% of the total utterances of negotiation, when responding to other learners. The NSs did not produce any of these features. On the decision making task, the proportions of modified utterances of response were 50% for the learners and 75% for the NSs.

[1] In Tables 1-6, both Pearson's chi-square test with Yates' continuity correction and Fisher's exact test are shown. However, we should basically consider Fisher's exact test because, due to the small counts we are dealing with, the chi-squared approximation may not be appropriate.

Table 1
Comparison of Learners' and NSs' Modified Utterances of Response in Negotiation as Modified Input on Two Communication Tasks (Hypothesis 1)

Communication task	Response type	Learner n	Learner %	NS n	NS %	Total (n)
Picture sequence						
	Mod R	3	60%	0	0%	3
	Oth R	2	40%	1	100%	3
Decision making						
	Mod R	9	50%	3	75%	12
	Oth R	9	50%	1	25%	10

Note. Mod R = modified responses; Oth R = other responses

Pearson's chi-square test with Yates' continuity correction

	X2	df	p
Picture sequence	0	1	1
Decision making	0.1248	1	0.7239

Fisher's exact test

Picture sequence	p-value = 1
Decision making	p-value = 0.594

Hypothesis 1 was, therefore, not confirmed, as the amount of modified input provided by learners to each other was not significantly different from the amount of modified input provided by NSs to the learners. This result was in contrast to that in Pica et al. (1996), in which Hypothesis 1 was partially confirmed for one of the tasks. In contrast, the learners in the present study performed more like NSs as sources of modified input.

Hypothesis 2'a had predicted that learners' responses of modified input in L-L negotiation would offer proportionately more simple structural segmentations of prior utterances than would NS responses of modified input during L-NS negotiation. Hypothesis 2'b had predicted that such distinctions would not be found.

As shown in Table 2, there was no support for Hypothesis 2'a or Hypothesis 2'b, this due to the absence of segmented responses by learners or NSs in the information gap tasks and the low frequency of only two instances of segmented responses by the learners in the decision-making tasks

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(22% of their response utterances). Learners used other types of modification in both tasks. This result was consistent with that of Pica et al. (1996), in which both learners and NSs used segmentation in only a small percentage of their responses. However, the relative lack of negotiation found among the L-L and L-NS dyads in the present study made it difficult to compare its results with those of Pica et al. (1996) on this negotiation-related feature.

Table 2

Comparison of Learners' and NSs' Segmented Utterances of Response in Negotiation as Modified Input on Two Communication Tasks (Hypothesis 2)

Communication task	Response type	Learner n	Learner %	NS n	NS %	Total (n)
Picture sequence						
	Seg R	0	0	0	0	0
	Oth Mod	3	100%	0	0	3
Decision making						
	Seg R	2	22%	0	0	2
	Oth Mod	7	78%	3	100%	10

Note. Seg R = segmented responses; Oth Mod = other modifications

Pearson's chi-square test with Yates' continuity correction*

	X2	df	p
Picture sequence	Inf.	1	NA
Decision making	0	1	1

Fisher's exact test

Picture sequence	p-value = 1
Decision making	p-value = 0.9999993

* Inf stands for 'indefinite' due to the number of zeros. NA stands for 'not available'.

Hypothesis 3'a had predicted that learners' responses during L-L negotiation would offer more L2 accurate input through simple structural modifications of prior utterances compared to other types of modification of those prior utterances. Hypothesis 3'b had predicted that learners' utterances that were simple segmentations of their own prior utterances and responses of other modification types would conform to L2 morphosyntax.

These hypotheses were tested by first identifying learners' responses that showed conformity to L2 morphosyntax and then comparing the percentage that were simple structural segmentations of learners' prior utterances with those that contained other modification types.

As was shown in Table 2, no segmented utterances of response were used by the learners in the picture sequence task. Out of the three utterances of response in negotiation that used other modifications, Table 3 shows that two (i.e. 67%) conformed to L2 morphosyntax. In the decision making task, Table 2 showed that learners used two segmented responses, both of which, as seen in Table 3, conformed to L2 morphosyntax. In addition, out of the seven utterances of response in negotiation that used other modification types, five (i.e. 71%) conformed to L2 morphosyntax.

Table 3
Comparison of Learners' Segmented Utterances of Response and Other Modified Utterances of Response in Negotiation for Conformity with L2 Morphosyntax on Two Communication Tasks (Hypothesis 3)

Communication task	Response type	Learner n	%	
Picture sequence				
	Seg R	0	0	
	Oth Mod	2	100%	(cf. Table 2: 67%)
Decision making				
	Seg R	2	29%	(cf. Table 2: 100%)
	Oth Mod	5	71%	(cf. Table 2: 71%)

Note. Seg R = segmented responses; Oth Mod = other modifications

In the present study, therefore, Hypothesis 3'b was confirmed: both segmented and other types of modified responses conformed to L2 morphosyntax for most of the time. However, as in Pica et al. (1996), Hypothesis 3a was not confirmed. Thus, it appeared that, even though the segmented responses all adhered to L2 morphosyntax, the infrequency with which the learners used this type of modification of their previous utterances made it an unlikely source of grammatical input for L2 learning.

As noted above, Hypotheses 4 and 5 dealt with the issue of learners as a source of feedback for L2 learning. Hypothesis 4'a had predicted that learners' signals that were segmentations of prior utterances would be greater in number than learner's signals of other modification types. Hypothesis 4'b had predicted that learners would use as much segmentation as other types of modification in their signals to NSs. These hypotheses

were tested by comparing the percentage of learners' signal utterances that modified their previous utterances through simple structural segmentation during L-L negotiation with the percentage of NSs' signal utterances that did likewise during L-NS negotiation.

As shown in Table 4, Hypothesis 4'a was not supported. In the information gap task, both learners and NSs used just one segmented utterance of response in negotiation (20% and 25% of their total signal utterances, respectively). In the decision making task, learners used four segmented signal utterances and NSs used three, in both cases 30% of their total number of signal utterances. Hypothesis 4'b was not supported: Learners' signals of other modification types, including lexical substitution and paraphrase outnumbered their use of segmented signals. When the relevant proportions were established, no statistically significant difference was found between the two groups. This is shown in Table 4.

Table 4
Comparison of Learners' and NSs' Segmented Signal Utterances in Negotiation as Feedback on Two Communication Tasks (Hypothesis 4)

		Learner		NS		Total
Communication task	Response type	n	%	n	%	(n)
Picture sequence						
	Seg Sig	1	20%	1	25%	2
	Oth Mod Sig	4	80%	3	75%	7
Decision making						
	Seg R	4	30%	3	30%	7
	Oth Mod Sig	11	70%	7	70%	18

Note. Seg Sig = segmented signals; Oth Mod Sig = other modified signals

Pearson's chi-square test with Yates' continuity correction

	X2	df	p
Picture sequence	0.3937	1	0.5303
Decision making	0.0744	1	0.785

Fisher's exact test

Picture sequence	p-value = 1
Decision making	p-value = 0.9999993

This result was not consistent with that of Pica et al. (1996). There, it was found that when signaling for message comprehensibility, learners

simply segmented a portion of each other's prior utterances. This was different from their responses to signals for message comprehensibility (Hypothesis 3) for which they produced a variety of modification types. In contrast, the more advanced learners of the present study used a variety of responses both when responding to signals for message comprehensibility and when signaling for message comprehensibility, due most likely to their more developmentally advanced repertoire for linguistic modification.

Hypothesis 5'a had predicted that learners' signals that were simple segmentations of each other's prior utterances would conform more to L2 morphosyntax than their signals that were of other modification types. This hypothesis was tested by first identifying learners' signal utterances that showed conformity to L2 morphosyntax and then comparing the percentage that were simple structural segmentations of their prior utterances with the percentage of those that contained other modification types.

As was the case with Hypothesis 3, no support could be found for Hypothesis 5'a. The learners used very few instances of segmented signals. As shown in Table 4, there was one instance in the information gap task and four in the decision making task. These signals, as seen in Table 5, conformed to L2 morphosyntax. However, signals of other modification types (four in the information gap task and eleven in the decision making task) also showed conformity to L2 morphosyntax, with 100% of other modified signals in the information gap task and 90% in the decision making task. Similarly, the study by Pica et al. (1986) showed no support for Hypothesis 5'a, but there was a trend in the direction of support that held across the two tasks used.

In the present study, support was found, therefore, for Hypothesis 5'b.

Table 5
Comparison of Learners' Segmented Signal Utterances and Other Modified Signal Utterances in Negotiation for Conformity with L2 Morphosyntax on Two Communication Tasks (Hypothesis 5)

Communication task	Learner Response type	n	%	
Picture sequence				
	Seg Sig	1	20%	(cf. Table 4: 100%)
	Oth Mod Sig	4	80%	(cf. Table 4: 100%)
Decision making				
	Seg Sig	4	29%	(cf. Table 4: 100%)
	Oth Mod Sig	10	71%	(cf. Table 4: 90%)

Note. Seg Sig = segmented signals; Oth Mod Sig = other modified signals

Hypothesis 6 had predicted that when learners were given signals from

other learners that modified their previous utterances, the percentage of modified output in their responses would not be greater than that in their responses to native speakers. Conversely, Hypothesis 7 had predicted that when learners were given signals from other learners that modified their previous utterances, the percentage of modified output in their responses would be greater than that in their responses to native speakers. Hypotheses 6 and 7 were tested by comparing the percentages of learner-modified responses that followed learner- and NS- modified signal utterances during L-L and L-NS negotiation.

As can be seen in Table 6, in the present study, support was found for Hypothesis 6, as the learners did not modify their output to a greater degree in negotiation with other learners than in negotiation with NSs. When the relevant proportions of the two groups were compared, no statistically significant difference was found. However, as shown in Table 6, the percentage of modified output in the responses by learners was greater than the percentage of modified output in the responses by NSs.

Table 6
Comparison of Learners' Modified Utterances of Response to Learners' and NSs' Modified Signals in Negotiation on Two Communication Tasks (Hypotheses 6 and 7)

		Learner Mod Sig.		NS Mod Sig.		Total
Communication task	Response type	n	%	n	%	(n)
Picture sequence						
	L Mod R	3	75%	0	0	3
	L Oth R	1	25%	2	100%	3
Decision making						
	L Mod R	8	67%	3	43%	11
	L Oth R	4	33%	4	57%	8

Note. Mod Sig = modified signals; L Mod R = learner- modified responses; L Oth R = learners' other responses

Pearson's chi-square test with Yates' continuity correction

	X2	df	p
Picture sequence	0.75	1	0.3865
Decision making	0.2834	1	0.5945

Fisher's exact test

Picture sequence	p-value = 0.4
Decision making	p-value = 0.3765

In the information gap task, learners responded to four signals from other learners that modified their previous utterances. Of these, 75% were modified versions of previous utterances compared to the null response to modified signals from NSs. The figures were lower in the decision-making task where learners used modification in 67% of their responses to modified signals from other learners and in 43% of their responses to modified signals from NSs.

In Pica et al. (1996) support was also found for Hypothesis 6. That result was explained by the limited linguistic resources of the learners. In the present study, the learners were more advanced in their L2 development. However, their level of proficiency might not have yet risen to a level that made a difference for them in relating to NSs. On the other hand, their use of modified input and feedback to both each other and NSs suggested that they could offer each other native-quality conditions for L2 learning in these areas.

Summary and discussion of results

With respect to the question of advanced EFL L2 learners as providers of input, the results of testing Hypotheses 1-3 revealed that on both communication tasks in which they participated, the learners' used a range of modifications beyond simple segmentation, which conformed to L2 morphosyntax. The advanced EFL learners of the present study thus were a richer source of modified input to each other than the low intermediate ESL learners in the study of Pica et al. (1996).

As for the question of learners as providers of feedback (Hypotheses 4 and 5), the study revealed that signals during L-L interaction offered feedback that consisted of structural segmentations and other types of modification and those signals conformed to L2 morphosyntax as well. Pica et al. (1996) found that when learners were given signals from other learners, these signals were predominantly segmentations of each other's prior utterance, and that they, too, were target-like. Based on these results, Pica et al. (1996) reasoned that learners at a low-intermediate level of proficiency can provide opportunities for grammatical feedback, albeit in a simplified form. Alternatively, the more advanced learners in the present study were able to offer more complex feedback and to do so with grammatical accuracy. The present study also revealed that there was no significant difference between the modified responses given by learners to signals from other learners or from NSs. Again, the advanced level of their learning allowed them to draw on their interlanguage resources in comparable ways across interactants.

As was the case in the study by Pica et al. (1996), L-L negotiation in the present study was not any more limited than L-NS negotiation in helping learners to produce more modified output. What was limited, however,

was the relatively low incidence of negotiation found among the learners and especially between the learners and the NSs. With only 21 signals in the L-L dyads and 6 signals from the learners in the NS-L dyads, negotiation seemed unlikely as the means through which learners would be provided with modified input, feedback and the opportunity to produce modified output. Of interest, therefore, were other strategies that were revealed through the learners' interaction. Two of the strategies identified were labeled completion and self-correction. These are discussed in the following section.

Completion and Correction Strategies

Completion is a kind of scaffolding that has been identified in research on the collaborative dialogue that takes place between two learners. (Pica et al. 1995; Swain 1995). Although it can be manifested in a variety of ways, completion is characterized by one interlocutor's hesitation over a word or sentence constituent, and the other interlocutor's suggesting the missing item. By means of this type of scaffolding, learners in the present study were observed to offer appropriate words or phrases in order to complete each other's utterances. They moved the discourse forward by constructing sentences and using different types of syntactic modification. The completion process was seen in three different formats found in the current data, identified as simple, chained, and nested completions, and shown below (see also, García Mayo and Pica, in preparation).

Simple completion

Learnet A	**Learner B**
a fishing pole is...	what you need to catch fish
	to fish, I think you need a fishing pole
yes	

In this exchange, learner A seemed to have difficulty completing his utterance and learner B suggested the appropriate continuation. Learner A then expressed acceptance.

Chained completion

Learner A	**Learner B**
no, with extra-clothes we have	
all and the other things are....	sheets, blankets ...
are not necessary	

In the above excerpt, learner A's utterance was incomplete; learner B completed that utterance and then learner A finished what he had started.

Nested completion

Learner A	Learner B
I would probably ...	perhaps ... yes ... but ....
kick him or ...	but it isn't his wife's ...
fault	

Although not very common, in this type of completion, each learner finished his own incomplete utterance. In the above example, a simple completion was also shown when learner A finished learner B's utterance (his wife's .... fault).

The incidence of correction in the data was confined almost completely to learner self-correction. There were very few instances of other correction. It appeared that learner assistance to other learners was through supplying words, phrases and clauses in the wake of pauses and hesitations. Self-correction occurred largely as learners clarified noun and verb features and forms, or made them more precise. Some examples of this strategy follow:

"I would probably get drunk, you know, if my dear has .... is gone"
"[...] but blankets are more stronger ... are stronger than ....sleeping bags"
"[...] yes, because he is in the same road and he is hitten ... hit"
"We are human beings, we are made of flesh and blood and just do ..... make mistakes"

Taken together, both of these strategies are encouraging as to the EFL environment as a learning environment. Their use among the learners seemed to suggest that during their interaction, the learners were able to draw from their own interlanguage store both to complete each other's message meaning and to correct and clarify message meaning on their own.

Despite these encouraging results on learners' ability to assist each other and to correct themselves during their interaction, there were other results that raised important concerns. Specifically, several areas of imprecision were given little attention during both L-L and L-NS interaction. Consistent patterns were observed with respect to pronoun omission in anaphoric reference and expletive constructions, adverb misplacement, and imprecisions of preposition use. In describing sequences of activity or making decisions during their tasks, for example, the learners were found to omit pronoun references, as in the following examples:

...what would you do? stay with him with her til ___ comes comes
I think ___ is the most important
I think ___ is a very good thing to try not to sleep...
...before drinking it you would need to purify ___ so I would choose....

Adverb misplacement was observed in utterances such as:

I don't like very much soup

Preposition misuse included omissions, as in

...because now he is knocking ___ the door
...a tent to live in, sleeping bags to sleep ___ and extra clothes...

and imprecisions such as

I agree with you except in one thing

The learners also produced lexical imprecisions that went unaddressed,

perhaps because the imprecision did not interfere with learners' overall message meaning:

> ... but frozen meat when it's not frozen it ruins..."
> "[...] because it is a lot caloritic ..."

Other learners said"first auxiliaries" instead of 'first-aid kit' and "good alimentation" instead of 'good food.'

Conclusions

The present study was motivated by questions and concerns about the interaction between L2 learners in an FL language setting. Considering how highly regarded CLT has become in tertiary level education in many FL contexts and considering that, due to the methodological changes brought about by this method, learners are increasingly becoming each other's models for language learning, we posited several research questions about the extent to which learner interaction in an FL setting could address conditions claimed to assist L2 learning.

Results of our research have revealed that, overall, interaction between advanced EFL learners can provide as much modified input, feedback and output as when interaction between learners and NSs takes place. We found that learners can offer each other modified L2 input and grammatically accurate feedback, and can produce modified output. However, we also found that these features were low in frequency, as negotiation, the usual vehicle for their generation, was seldom used during the learners' interaction. What was observed was that the learners were able to convey comprehensible messages as required by the tasks used in the study, so there was little need for negotiation on their parts.

In their attempts to achieve lexical precision and grammatical accuracy, the learners used, as we have seen, other interactional strategies such as completion and self-correction that appeared to generate input, feedback and output to serve their L2 learning needs. These strategies are important aids to the development of grammatical and lexical features that even advanced learners have yet to master.

In sum, the present study revealed that advanced EFL learners appear to be a suitable resource for each other's L2 learning. This is encouraging news in light of constraints characteristic of EFL environments, namely, the number of students per classroom and the limited access to both NS teachers and adequate L2 samples. However, results also suggested that the emphasis on communication tasks in the EFL classroom may not be sufficient to respond to the needs of advanced learners. Our challenge, therefore, is to devise communication tasks that will target grammatical and lexical features that the learners still need to develop. In responding to such challenges, we look toward the theoretical writings and empirical studies of Doughty and Williams (1998), Long and Robinson (1998), and Skehan (1998) to guide our future efforts.

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